

WVNSCO

West Valley Nuclear Services Company

Progress Report for the

West Valley Demonstration Project



U.S. DOE Voluntary Protection Program
Legacy of Stars Award
Presented to
West Valley Nuclear Service Company, LLC.
THROUGH THEIR FULL DEDICATION AND TOTAL COMMITMENT TO
THE PRINCIPLES OF VPP THEY HAVE CONTINUED TO ACHIEVE AN
OUTSTANDING LEVEL OF PERFORMANCE IN MEETING ESTABLISHED
SAFETY AND HEALTH GOALS.



December 2005

Table of Contents

Introduction/WVNSCO Contract Information	4
WVNSCO Contract Performance Charts	5
Project Baseline Summary Reports and Assessments	
Total WVNSCO Contract Performance Analysis	7
PBS OH-WV-0013; Solid Waste Stabilization And Disposition - West Valley	9
PBS OH-WV-0040; Nuclear Facility D&D - West Valley	9
PBS OH-WV-0020; Safeguards and Security	13
Financial / Performance Information:	
Project Earned Value/Funding Status	14
Milestones	
RHWF-1; Remove Mixed Waste from Chemical Process Cell Waste Storage Area, Process remote-handled LLW and dispose of LLW	(Page 9)
LLW-1; Dispose of LLW at an approved facility	(Page 9)
DD-1; Remove/demolish trailers, modular, and ancillary structures	(Page 12)

WVNSCO PROGRESS REPORT

INTRODUCTION: The West Valley Demonstration Project Act, Public Law 96-368, directed the U. S. Department of Energy to lead the stabilization and remediation of the closed commercial nuclear fuel reprocessing facility located at West Valley, New York. Solidification of stored legacy liquid high-level radioactive waste generated during fuel reprocessing activities and preparation for its off-site disposal were primary objectives of the Act. Solidification through the process of vitrification was completed in 2002 and the waste remains stored at the West Valley site. The workscope is now directed at decontamination of the facility and waste disposition activities. West Valley Nuclear Services Company is the prime contractor to the Department of Energy at the facility.

Report No. 276

Reporting Period: December 2005

CONTRACT TITLE AND NUMBER: West Valley Demonstration Project
Operating Contract
DE-AC24-81NE44139

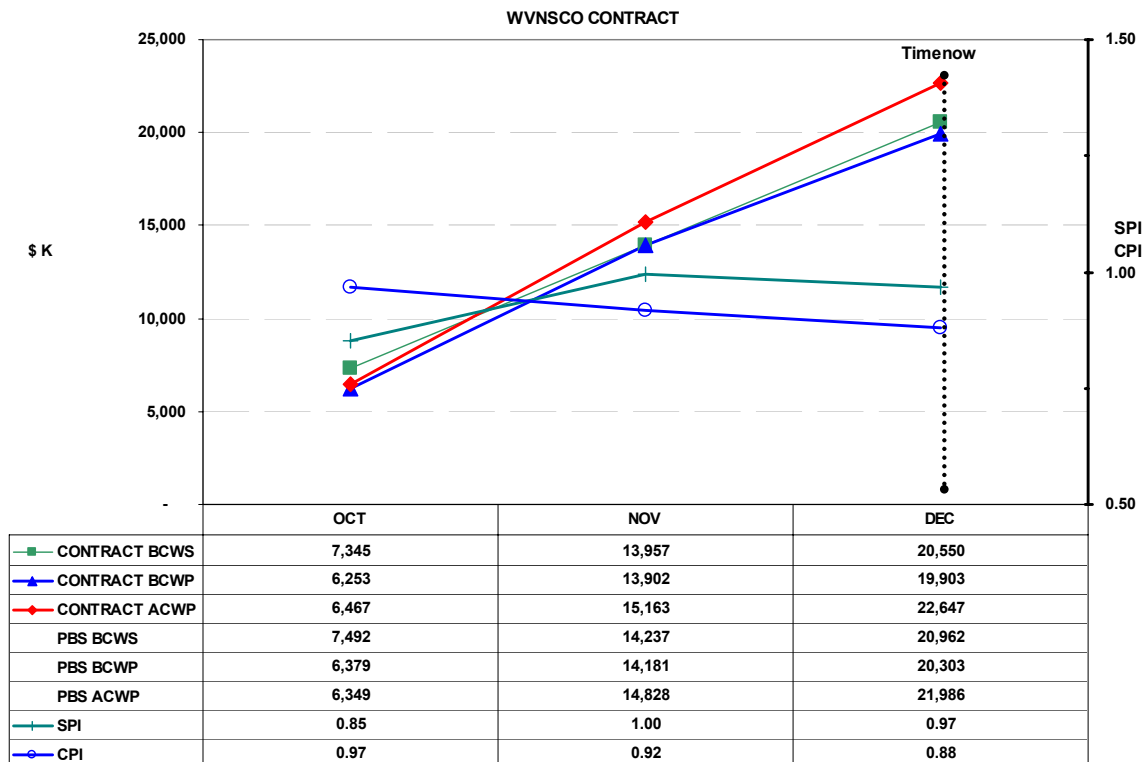
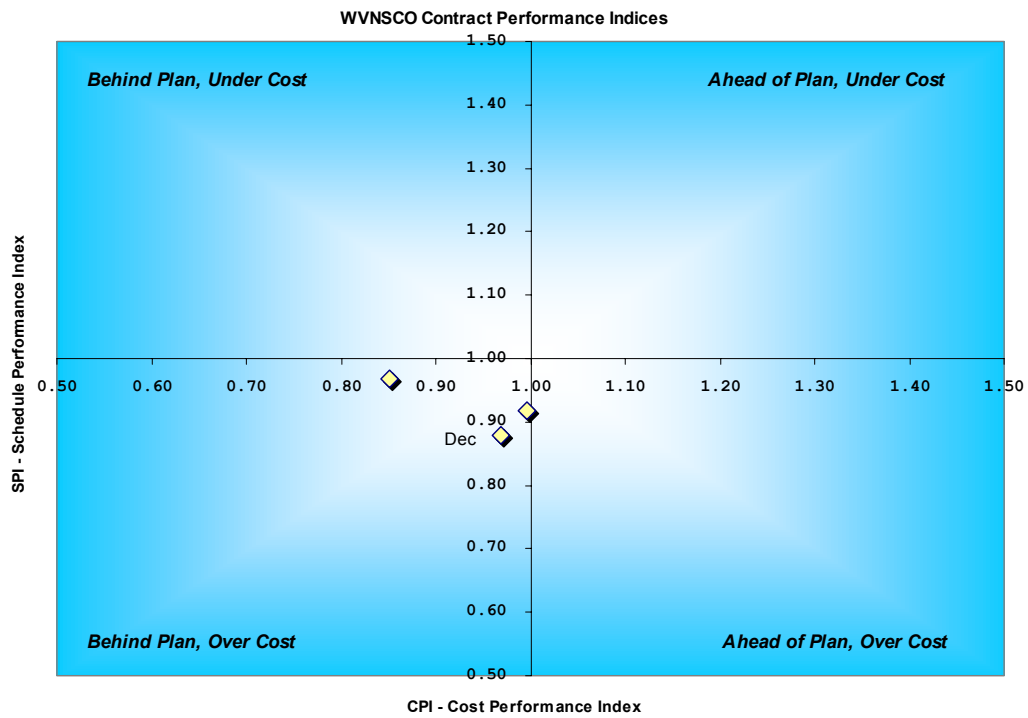
CONTRACTOR NAME: West Valley Nuclear Services Company
10282 Rock Springs Road
West Valley, New York 14171-9799

CONTRACT PERIOD: January 1, 2005 – December 31, 2005

CURRENT PERIOD AUTHORIZED CONTRACT SCOPE: West Valley Nuclear Services Company is operating the West Valley Demonstration Project under a contract continuance that expires on December 31, 2005. On December 20, 2005, a contract extension for the period of January 1, 2006 through December 31, 2006 was signed. West Valley Nuclear Services Company, as DOE's management and operating contractor under this performance-based contract, performs day-to-day activities at the existing Western New York Nuclear Services Company site and maintains the existing facilities to DOE standards. Workscopes in progress are RHWF-1, Remove Mixed Waste from the Chemical Process Cell Waste Storage Area, Process Remote Handled LLW, and Dispose of LLW with a Pathway for Disposal; LLW-1, Dispose of LLW at an Approved Disposal Facility; DD-1, Remove/Demolish Trailers, Modular and Ancillary; and VCD-1, Vitrification Cell Dismantlement and Waste Shipping.

SAFETY PERFORMANCE: The WVDP's employees worked 67,017 safe work hours in December 2005, bringing the cumulative consecutive work hours without a lost-time work injury or accident to approximately 3,706,823. Two first aids were reported in December; one involving an employee who complained of a sore back after shoveling snow and another who was treated for knee pain after a slipping incident. The Total Recordable Case Rate (TRC) is 0.4 and the Days Away, Restricted, or Transferred (DART) remains at 0 for the WVDP.

During December, West Valley Nuclear Services Company attained the requirements for a third consecutive Washington Group International President's Award for Safety. The requirements are one year and one million hours without a lost time work accident or illness since the last President's Award was earned.



December Status Summary:

Current period performance marking completion of the current contract milestones was significant at \$6,001K Budgeted Cost of Work Performed. The monthly performance was (\$592K) behind schedule and (\$1,484K) over budget. The current period unfavorable schedule variance represented performance by the Low Level Waste (LLW) Disposal Project which was (\$543K) less than the aggressive total budgeted contract amount. During December, the LLW Project shipped off site an additional 28,585 cubic feet of LLW for disposal. The current period cost variance was primarily driven by increased transportation and disposal costs for LLW (\$1,015K).

The significant current period performance culminated in the cumulative negative schedule variance being a marginal level of (3%). Factors which contributed to the cumulative negative cost variance (13%) were greater than planned costs for the Infrastructure Reduction project (\$291K) due to increased subcontract and labor costs to maintain schedule commitments, the unbudgeted closeout of the Vitrification Dismantlement Project (\$106K), operational expense for the Remote Handled Waste facility being greater than budgeted (\$167K) and increased transportation and disposal cost for low level waste (\$1,540K). The increased transportation costs are due to more numerous truck shipments because of constraints on package size and weight restrictions, and fuel surcharges caused by market driven price increases. Site operations experienced a (\$747K) overrun driven by unbudgeted labor and material costs for resin waste stream inspection and processing activities prior to disposal. An element of the cumulative cost variance is the increased assessment for pension contribution costs which accounts for approximately \$600K (~40%) of the year to date labor cost variance.

Milestone status at the end of December is as follows:

RHWF -1; Remove Mixed Waste from the Chemical Process Cell Waste Storage Area, Process Remote Handled LLW, and Dispose of LLW with a Pathway to Disposal:

Clean up of the Remote-Handled Waste Facility Work Cell following processing of the four mixed waste boxes is complete. The facility has entered a maintenance period and repairs to the PARs (powered manipulators) are underway.

LLW-1; Dispose of LLW at an Approved Disposal Facility:

Waste shipments by truck were performed through December 16, 2005, which concluded the CY2005 shipping campaign in time to allow the receiver sites time for receipt inspection prior to the holiday slowdown. The total CY2005 volume shipped was 306,316 ft³. Through December 13 the total volume of waste processed was 320,292 ft³. During the balance of the month, the project continued processing waste and preparing for future waste shipping activities. Preparation activities included rebaselining the Integrated Waste Tracking System, implementing lessons learned into the existing program, and reorganizing waste storage facilities to optimize future performance.

DD-1; Remove / Demolish Trailers, Modular & Ancillary Structures:

All remaining trailers and speed spaces, per the milestone requirements, were removed from the WVDP by the end of December. All utility isolations were completed. Documentation, in the form of Engineering Change Notices and a new Reference General Arrangement Drawings set was prepared, for configuration control.

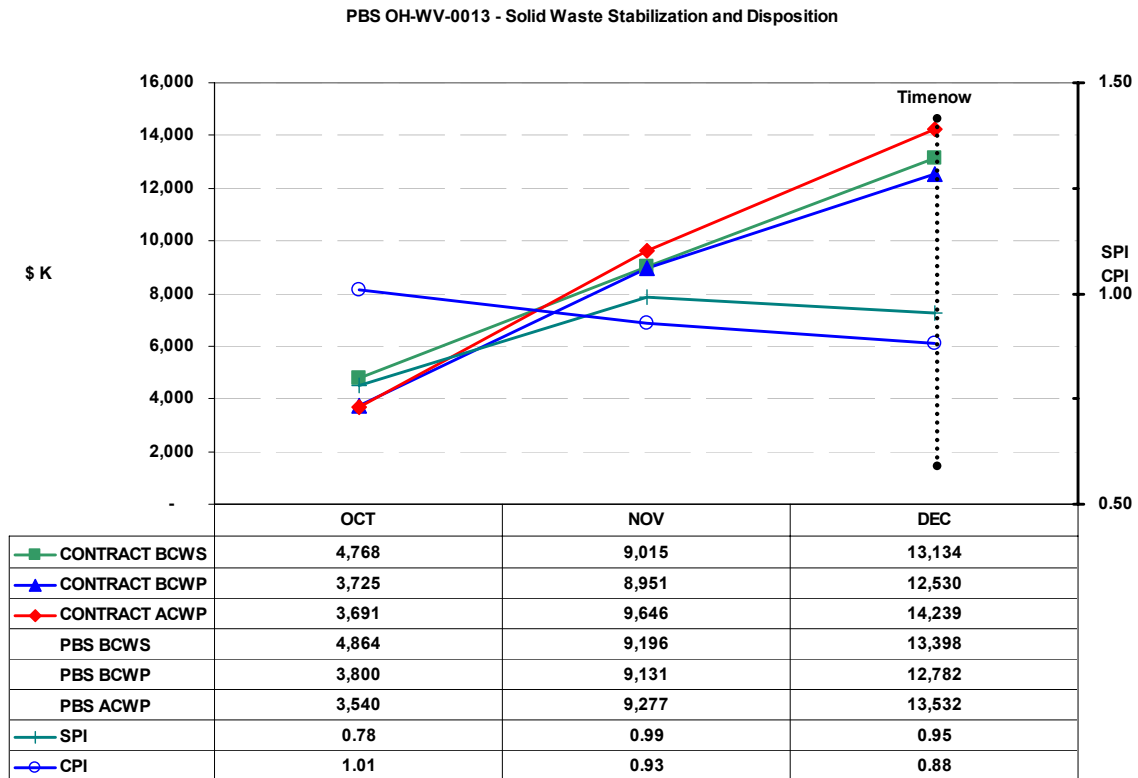
Other Notable Activities:

The spending analysis developed to assess the ability to perform all the contract scope within the projected funding availability indicated that performance of all the contract commitments was constrained by funding availability. The enacted performance strategy to balance contract performance against readiness capacity and funding availability allowed maximum accomplishment of contractual commitments within the allocated operating funds.

PBS OH-WV-0013

Solid Waste Stabilization and Disposition-West Valley

Project Baseline Summary (PBS) OH-WV-0013 includes solid waste stabilization and disposition at the West Valley Demonstration Project. The PBS includes all the waste management activities required for safe and efficient management of all legacy and newly generated waste at West Valley. A brief summary of each of the PBS-OH-WV-0013 workscopes and the monthly progress reported by cost account designations follows.



WBS 106100 - Remote Handled Waste Facility (RHWF) Operation

The current scope of this account includes the characterization, size reduction, and packaging of highly radioactive and/or contaminated expended project equipment, components, waste and other materials by remote means in the Remote Handled Waste Facility. Milestone # RHWF-1; Remove Mixed Waste from the Chemical Process Cell Waste Storage Area (CPC/WSA), Process remote-handled LLW, and dispose of LLW with a pathway for disposal was added to the contract on March 24, 2005. The scope includes completion of all activities necessary to remove mixed waste (MW) from the current CPC/WSA facility and process or store the MW in a RCRA facility. During the contract period, LLW generated from this activity with a pathway for disposal will be shipped off site.

Monthly Progress – Cleanup of the Remote-Handled Waste Facility was completed and followed by a maintenance outage to repair equipment.

CURRENT PERIOD INFORMATION					CUMULATIVE INFORMATION					
106100 REMOTE- HANDLED WASTE FACILITY (RHWF)										
BCWS	BCWP	ACWP	SCHED	COST	BCWS	BCWP	ACWP	CMSVAR	CMCVAR	BAC
385	387	626	3	(239)	1,854	1,776	1,943	(78)	(167)	1,854

Variance Analysis – The current month cost variance is due to the remote handled waste project labor costs expended to assure completion of the contract milestone commitment. Another element of the cost variance was the labor expended to identify repairs for the overhead crane and powered manipulators during December. The cumulative schedule variance is due to non-milestone related facility maintenance and repair activities.

WBS 106200 – Low level Waste (LLW) Disposition

The current scope of this account includes tracking and shipment of processed low level radioactive waste and mixed waste for offsite disposal. The work associated with Milestone LLW-1, Dispose of LLW at an Approved Disposal Facility, was added on March 24, 2005. This includes assembly of an additional sorting area in Lag Storage Area 4 (LSA 4) and the processing, packaging, and disposal of up to 400,000 cubic feet of LLW at Envirocare or the Nevada Test Site.

Monthly Progress – Waste shipping efforts concluded on December 16 to accommodate holiday schedules at the waste disposal facilities. The total volume of waste shipped off site for disposal in 2005 was 306,316 ft³. Additional waste management efforts in December were focused on processing waste in preparation for 2006 shipment and evaluation of the waste management program and equipment in an effort to identify areas to improve processing and efficiency rates.

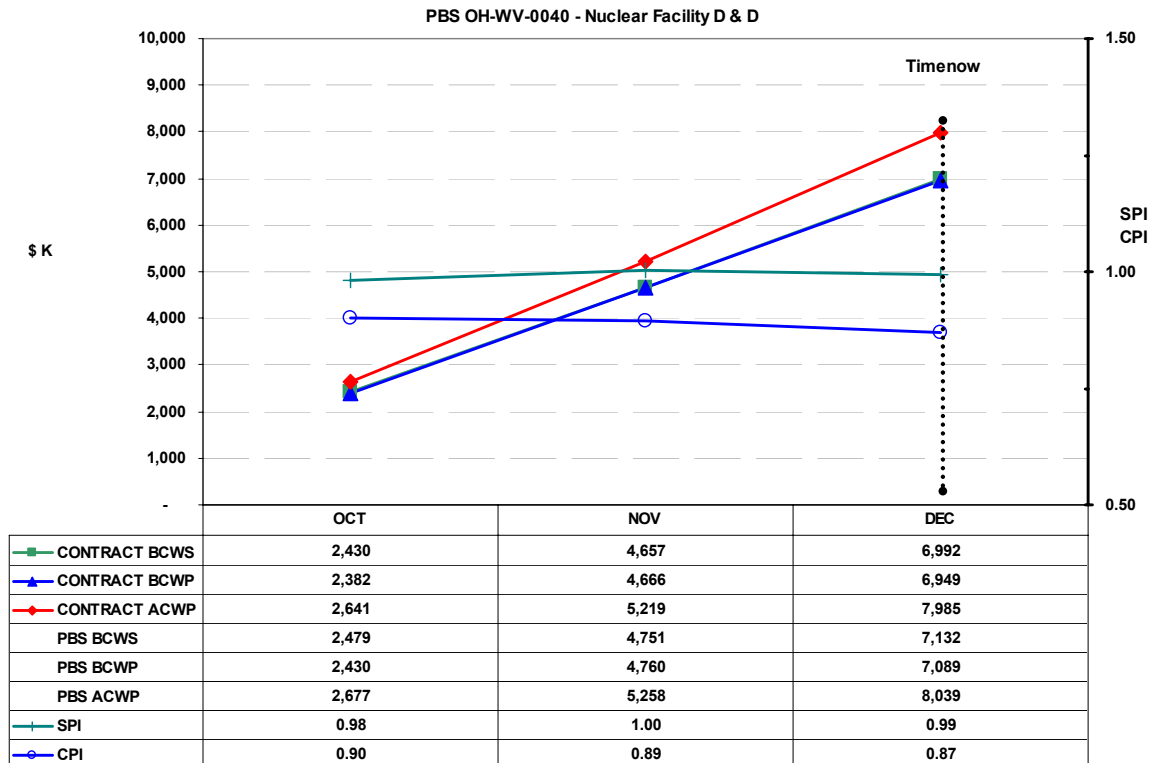
CURRENT PERIOD INFORMATION					CUMULATIVE INFORMATION					
106200 LOW LEVEL WASTE (LLW) DISPOSITION										
BCWS	BCWP	ACWP	SCHED	COST	BCWS	BCWP	ACWP	CMSVAR	CMCVAR	BAC
3,734	3,192	3,968	(543)	(776)	11,280	10,754	12,294	(526)	(1,540)	15,269

Variance Analysis – The cumulative unfavorable schedule variance (\$526K) is due to processing less low level waste than planned (320K cf vs. 350K cf) and less than planned performance regarding the Waste Incidental to Reprocessing Reports for Drum Cell and Sodium Bearing Waste streams. The cumulative cost variance (\$1,540K, -14%) is primarily due to the higher than budgeted cost for low level waste (LLW) transportation and disposal. This is a result of increased transportation costs for smaller loads due to shipping constraints (waste container weight limits, drums in overpacks, intermodal containers & dumps with boxes that could not be used as a final disposal package) and increased diesel fuel surcharges associated with truck shipments to Nevada and Utah.

PBS OH-WV-0040

Nuclear Facility Decontamination and Decommissioning – West Valley

The Project Baseline Summary OH-WV-0040 includes decontamination, demolition, and safe site operations at the West Valley Demonstration Project. All activities associated with decontamination within radiation areas, the demolition of contaminated and non-contaminated structures and facilities, and the routine and non-routine operation of the entire WVDP site are included in this PBS. A brief summary of the PBS OH-WV-0040 work scopes and the monthly progress reported by cost account elements follows.



WBS 105130 – Balance of Plant/Footprint Reduction

The scope of this account is to perform strategies developed for deactivation, dismantlement, and demolition of the WVDP facilities and equipment. This account includes activities to prepare facility removal strategies, perform initial characterization and sampling, relocation of site personnel and materials, decontamination of facilities and equipment, and final disposition of debris. Milestone #DD-1; Remove/Demolish Trailers, Modular & Ancillary Structures and Empty Warehouse #2, was added March 24, 2005. This work scope includes the relocation of affected personnel, safe utility isolation, structure removal, site grading, and erosion protection.

Monthly Progress – The balance of the vacated office trailers were removed from the site and grading of all affected areas was completed.

CURRENT PERIOD INFORMATION					CUMULATIVE INFORMATION					
105130 BALANCE OF PLANT DECONTAMINATION AND FOOTPRINT REDUCTION										
BCWS	BCWP	ACWP	SCHED	COST	BCWS	BCWP	ACWP	CMSVAR	CMCVAR	BAC
331	332	389	0	(57)	1,108	1,108	1,399	0	(291)	1,108

Variance Analysis – The cumulative unfavorable cost variances consist of (\$127K) labor and (\$164K) nonlabor. The labor overrun is unplanned overtime cost expended to recover delays caused by inclement weather and subcontractor trailer removal delays. The nonlabor cost overrun is caused by the need for additional gravel due to wet ground conditions, using more waste containers than planned because of the unplanned demolition of the Conference Rooms, and additional site subcontract services due to the unplanned additional site staging of trailers caused by delays in obtaining DOT permits to remove the units from site.

WBS 105210 – Vitrification Facility Decontamination

The current fiscal year scope of this account requires WVNSCO to complete all processes necessary for the decontamination and dismantlement of the Vitrification Facility to bring the facility to an interim post processing state. This cost account includes the continued development of equipment and processing concepts, size reduction, and packaging through proof-of-principle (POP) and select prototyping evolutions.

Monthly Progress – The Vitrification Facility Decontamination scope was completed in October when the facility was placed into safe shutdown status.

CURRENT PERIOD INFORMATION					CUMULATIVE INFORMATION					
105210 VITRIFICATION FACILITY DECONTAMINATION										
BCWS	BCWP	ACWP	SCHED	COST	BCWS	BCWP	ACWP	CMSVAR	CMCVAR	BAC
0	0	2	0	(2)	0	0	106	0	(106)	0

Variance Analysis – The cumulative cost variance consists of unbudgeted (\$74K) labor and (\$32K) nonlabor. The labor costs are due to residual work required to secure the facility in a safe shutdown condition. The nonlabor overrun is due to subcontract costs associated with monitoring recovery plans generated as a result of the vitrification incident last January.

WBS 107100 – Site Operations and Infrastructure

The current scope of this account includes the safe site operation of the Main Plant and Analytical Laboratory Cell systems and overall site engineering in support of the Main Plant and site facilities.

Monthly Progress – Routine safe site operations, including site maintenance, analytical laboratory support and environmental monitoring activities, continued as planned.

CURRENT PERIOD INFORMATION					CUMULATIVE INFORMATION					
107100 SITE OPERATIONS AND INFRASTRUCTURE										
BCWS	BCWP	ACWP	SCHED	COST	BCWS	BCWP	ACWP	CMSVAR	CMCVAR	BAC
1,608	1,608	2,076	0	(468)	4,904	4,904	5,652	0	(747)	4,904

Variance Analysis – The current period cost variance of (\$468K) is primarily due to unplanned labor expended to prepare legacy resin wastes for offsite disposal (\$291K). Another (\$77K) of cost variance was due for snow removal and freeze protection activities being greater than planned due to extreme weather during December. Recovery of service interruption for the electrical and phone systems incurred approximately 60K during the December period. The cumulative cost variance is caused by the unplanned labor expended to prepare legacy resin wastes for offsite disposal and labor costs for radiation protection services being greater than planned.

WBS 107200 – Environmental Restoration and North Plateau Management

Work activities include the Resource Conservation and Recovery Act (RCRA 3008(H) consent order engineering work and the integration of those work activities with WVDP completion activities. Activities include the monitoring and engineering associated with the North Plateau groundwater plume. At DOE's request, scope was added, via formal change control, for the development of five Corrective Measures Studies as required by the RCRA 3008(h) Consent Order.

Monthly Progress – Normal monitoring operations in support of current groundwater monitoring workscope continued. The subcontractor, URS, performed work on the revisions to the Corrective Measures Study (CMS) Work Plans for the WVDP, the development of the human health and ecological hazard (risk) evaluations for the units which NYSDEC requested CMSs, and continued development of the CMSs under the RCRA 3008(h) Consent Order.

CURRENT PERIOD INFORMATION					CUMULATIVE INFORMATION					
107200 ENVIRONMENTAL RESTORATION, NORTH PLATEAU										
BCWS	BCWP	ACWP	SCHED	COST	BCWS	BCWP	ACWP	CMSVAR	CMCVAR	BAC
205	153	176	(52)	(23)	400	358	387	(43)	(29)	634

Variance Analysis – The current and cumulative schedule variances are due to less than planned performance for the Corrective Measures Studies work which was added to the account during November. The current and cumulative cost variances are minimal.

WBS 107300 – Safe Storage of Waste

The scope of this account includes the proper packaging, handling, and storage of low-level waste, mixed waste, transuranic waste, hazardous waste, industrial, and sanitary waste in accordance with applicable rules, regulations, and administrative controls.

Monthly Progress – The current scope of this account includes the proper packaging, handling and storing of low level waste, mixed waste and transuranic, hazardous, industrial and sanitary waste.

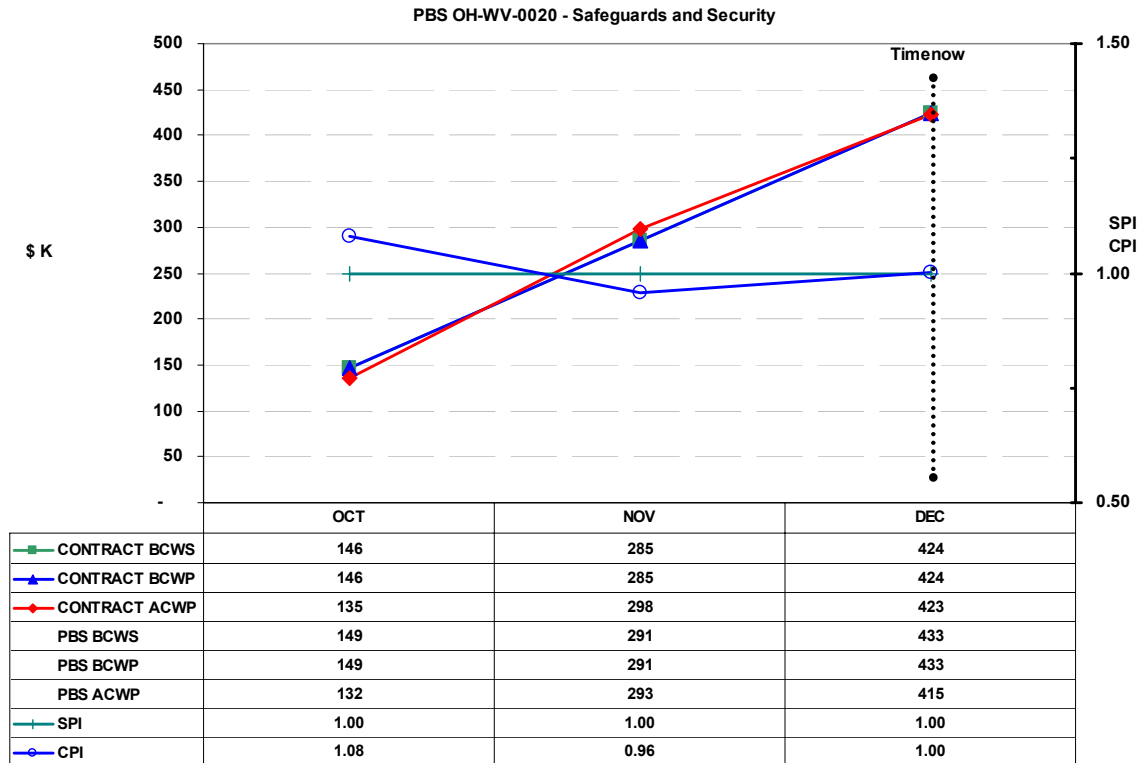
CURRENT PERIOD INFORMATION					CUMULATIVE INFORMATION					
107300 SAFE STORAGE OF WASTE										
BCWS	BCWP	ACWP	SCHED	COST	BCWS	BCWP	ACWP	CMSVAR	CMCVAR	BAC
190	190	142	0	48	579	579	440	0	140	579

Variance Analysis – The cumulative positive cost variance of \$140K is primarily attributable to expending less labor hours than budgeted. The lower labor expenditures for Safe Storage of Waste oversight that are being realized represent cost reductions greater than budgeted and are a result of the successful Low Level Waste processing and off-site shipments (cost account 106200), thus reducing the required onsite legacy waste monitoring activities.

PBS OH-WV-0020

Safeguards and Security – West Valley

This Project Baseline Summary provides for overall security of property, personnel, and nuclear materials at the WVDP in accordance with DOE standards. The administration and operation of a protective force of trained and qualified personnel, site access control, implementation and monitoring of controlled areas, and employee identification systems are included. Physical security is provided. This includes an extensive lock and key system, remote closed-circuit television, alarm monitoring, and area fencing and barrier protection. To ensure that all DOE unclassified information resources are identified and protected in a manner consistent with the project mission and potential cyber threats, overall cyber security is included.



WBS 109100 – Safeguards and Security

This account provides general security, physical security, and cyber security in accordance with all applicable DOE standards and regulations.

Monthly Progress– Normal security operations in support of ongoing site activities continued.

CURRENT PERIOD INFORMATION					CUMULATIVE INFORMATION					
109100 SAFEGUARDS AND SECURITY										
BCWS	BCWP	ACWP	SCHED	COST	BCWS	BCWP	ACWP	CMSVAR	CMCVAR	BAC
139	139	124	0	15	424	424	423	0	2	424

Variance Analysis – The current and cumulative cost variances are negligible.

TOTAL PROJECT EARNED VALUE REPORT and FUNDING STATUS

TOTAL PROJECT EARNED VALUE REPORT PBS/WBS COST ACCOUNT LEVELS	FY 2006 1ST QTR BAC	CURRENT PERIOD					FISCAL YEAR-TO-DATE				
		BCWS Sched	BCWP Complete	ACWP Spent	SV Sched	CV Cost	BCWS Sched	BCWP Complete	ACWP Spent	SV Sched	CV Cost
PBS OH-WV 013-Solid Waste Stabilization & Disposition	13,134	4,119	3,579	4,594	(540)	(1,015)	13,134	12,530	14,239	(604)	(1,709)
106100 Remote Handled Waste Facility (RHWF)	1,854	385	387	626	3	(239)	1,854	1,776	1,943	(78)	(167)
106200 Low Level Waste (LLW) Disposition	11,280	3,734	3,192	3,968	(543)	(776)	11,280	10,754	12,294	(526)	(1,540)
106500 Sodium Bearing Waste Disposition	-	-	-	-	-	-	-	-	2	-	(2)
PBS OH-WV-020 - Safeguards & Security	424	139	139	124	0	15	424	424	423	(0)	2
109100 Safeguards & Security	424	139	139	124	0	15	424	424	423	(0)	2
PBS OH-WV0-0040 - Nuclear Facility D&D	6,992	2,335	2,283	2,766	(52)	(483)	6,992	6,949	7,985	(43)	(1,036)
105130 Balance of Plant/Footprint Reduction	1,108	331	332	389	0	(57)	1,108	1,108	1,399	-	(291)
105140 Project Facility Decon Infrastructure Mgmt	-	-	-	(20)	-	20	-	-	1	-	(1)
105210 Vitrification Facility Decontamination	-	-	-	2	-	(2)	-	-	106	-	(106)
107100 Site Operations & Infrastructure	4,904	1,608	1,608	2,076	0	(468)	4,904	4,904	5,652	0	(747)
107200 Environmental Restoration	400	205	153	176	(52)	(23)	400	358	387	(43)	(29)
107300 Safe Storage Of Waste	579	190	190	142	0	48	579	579	440	(0)	140
10700 Site Disposition Plan	-	-	-	2	-	(2)	-	-	2	-	(2)
PMB	20,550	6,593	6,001	7,484	(592)	(1,484)	20,550	19,903	22,647	(647)	(2,744)
Undistributed Budget	-	-	-	-	-	-	-	-	-	-	-
Administrative	-	-	-	-	-	-	-	-	-	-	-
WVNSCO MR	587	-	-	-	-	-	-	-	-	-	-
TOTAL WVNSCO	21,137	6,593	6,001	7,484	(592)	(1,484)	20,550	19,903	22,647	(647)	(2,744)
Fee	2,742	914	674	674	(240)	-	2,742	2,039	2,039	(703)	-
DOE MR	(334)	-	-	-	-	-	-	-	-	-	-
Non Project	-	-	-	-	-	-	-	-	-	-	-
s/t	2,408	914	674	674	(240)	-	2,742	2,039	2,039	(703)	-
Total Budget Plan WVNSCO	23,545	7,507	6,675	8,158	(832)	(1,484)	23,292	21,942	24,686	(1,350)	(2,744)

FUNDING STATUS - Department Of Energy

Project Baseline Summary - Description	B & R Code	FY2005 Uncosted	FY2006 Obligated to Date	Total Contract Available	Fiscal Year Cost To Date	Current Uncosted
PBS OH-WV-0013 Solid Waste Stabilization & Disposition-West Valley	EZ5541130	1,061	15,300	16,361	13,532	2,829
PBS OH-WV-0040 Nuclear Facility Decontamination & Decommissioning-	EZ5541400	1,761	8,200	9,961	8,039	1,922
Subtotal Non Defense (Environmental Management) "Obligated to WVNSCO"		2,822	23,500	26,322	21,571	4,751
PBS OH-WV-0020 Safeguards & Security: Protective Forces	FS3041010	708	130	838	216	622
PBS OH-WV-0020 Safeguards & Security: Cyber Security	FS3041050	274	90	364	108	256
PBS OH-WV-0020 Safeguards & Security: Program Management	FS3041090	195	145	340	90	250
Subtotal Defense (Safeguards & Security)"Obligated to WVNSCO"		1,178	365	1,543	415	1,128
Overall Total Dept Of Energy Funds "Obligated to WVNSCO"		4,000	23,865	27,865	21,986	5,879

Notes:

All entries in thousands of dollars - sum of the parts may vary from total due to rounding.

Total Budget Plan includes NYS 10% contribution